RAW SEQUENCE LISTING

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Application Serial Number:	10/820, 843	
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SEQUENCE LISTING

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١	ıΤ	/ GENERAL	INFORMATION:

(i) APPLICANT: Choulika, Andre Perrin, Arnaud Dujon, Bernard

Nicolas, Jean-Francois

- (ii) TITLE OF INVENTION: Nucleotide Sequence Encoding the Enzyme I-SCEI and the Uses Thereof
- (iii) NUMBER OF SEQUENCES: 52
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & Dunner
 - (B) STREET: 1300 I Street, N.W.
 - (C) CITY: Washington
 - (D) STATE: D.C.
 - (E) COUNTRY: USA
 - (F) ZIP: 20005-3315
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: 10820843
 - (B) FILING DATE: 2004-04-09
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08336241
 - (B) FILING DATE: 07-NOV-1994
 - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 07/971,160
 - (B) FILING DATE: 05-NOV-1992
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 07/879,689
 - (B) FILING DATE: 05-MAY-1992
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Potter, Jane E.R.
 - (B) REGISTRATION NUMBER: 33,332
 - (C) REFERENCE/DOCKET NUMBER: 03495-0111-03000
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 202-408-4000
 - (B) TELEFAX: 202-408-4400

- (2) INFORMATION FOR SEQ ID NO:1:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 714 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

ATGCATATGA AAAACATCAA AAAAAACCAG GTAATGAACC TCGGTCCGAA CTCTAAACTG

CTGAAAGAAT ACAAATCCCA GCTGATCGAA CTGAACATCG AACAGTTCGA AGCAGGTATC 120

GGTCTGATCC TGGGTGATGC TTACATCCGT TCTCGTGATG AAGGTAAAAC CTACTGTATG

CAGTTCGAGT GGAAAAACAA AGCATACATG GACCACGTAT GTCTGCTGTA CGATCAGTGG 240

GTACTGTCCC CGCCGCACAA AAAAGAACGT GTTAACCACC TGGGTAACCT GGTAATCACC 300

TGGGGCCCC AGACTTTCAA ACACCAAGCT TTCAACAAAC TGGCTAACCT GTTCATCGTT 360

AACAACAAA AAACCATCCC GAACAACCTG GTTGAAAACT ACCTGACCCC GATGTCTCTG 420

GCATACTGGT TCATGGATGA TGGTGGTAAA TGGGATTACA ACAAAAACTC TACCAACAAA

TCGATCGTAC TGAACACCCA GTCTTTCACT TTCGAAGAAG TAGAATACCT GGTTAAGGGT

CTGCGTAACA AATTCCAACT GAACTGTTÁC GTAAAAATCA ACAAAAACAA ACCGATCATC

TACATCGATT CTATGTCTTA CCTGATCTTC TACAACCTGA TCAAACCGTA CCTGATCCCG 660

CAGATGATGT ACAAACTGCC GAACACTATC TCCTCCGAAA CTTTCCTGAA ATAA 714

- (2) INFORMATION FOR SEQ ID NO:2:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 237 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met His Met Lys Asn Ile Lys Lys Asn Gln Val Met Asn Leu Gly Pro

Asn Ser Lys Leu Leu Lys Glu Tyr Lys Ser Gln Leu Ile Glu Leu Asn 20 25 30

Ile Glu Gln Phe Glu Ala Gly Ile Gly Leu Ile Leu Gly Asp Ala Tyr 35 40 45

Ile Arg Ser Arg Asp Glu Gly Lys Thr Tyr Cys Met Gln Phe Glu Trp 50 55 60

Lys Asn Lys Ala Tyr Met Asp His Val Cys Leu Leu Tyr Asp Gln Trp 65 70 75 80

Val Leu Ser Pro Pro His Lys Lys Glu Arg Val Asn His Leu Gly Asn 85 90 95

Leu Val Ile Thr Trp Gly Ala Gln Thr Phe Lys His Gln Ala Phe Asn
100 105 110

Lys Leu Ala Asn Leu Phe Ile Val Asn Asn Lys Lys Thr Ile Pro Asn 115 120 125

Asn Leu Val Glu Asn Tyr Leu Thr Pro Met Ser Leu Ala Tyr Trp Phe 130 135 140

Met Asp Asp Gly Gly Lys Trp Asp Tyr Asn Lys Asn Ser Thr Asn Lys 145 150 155 160

Ser Ile Val Leu Asn Thr Gln Ser Phe Thr Phe Glu Glu Val Glu Tyr 165 170 175

Leu Val Lys Gly Leu Arg Asn Lys Phe Gln Leu Asn Cys Tyr Val Lys 180 185 190

Ile Asn Lys Asn Lys Pro Ile Ile Tyr Ile Asp Ser Met Ser Tyr Leu 195 200 205

Ile Phe Tyr Asn Leu Ile Lys Pro Tyr Leu Ile Pro Gln Met Met Tyr 210 215 220

Lys Leu Pro Asn Thr Ile Ser Ser Glu Thr Phe Leu Lys 225 230 235

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 722 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

AAAAATAAAA TCATATGAAA AATATTAAAA AAAATCAAGT AATCAATCTC GGTCCTATTT 60

CTAAATTATT AAAAGAATAT AAATCACAAT TAATTGAATT AAATATTGAA CAATTTGAAG

CAGGTATTGG TTTAATTTTA GGAGATGCTT ATATTCGTAG TCGTGATGAA GGTAAAACTT 180

ATTGTATGCA ATTTGAGTGG AAAAATAAGG CATACATGGA TCATGTATGT TTATTATATG 240

ATCAATGGGT ATTATCACCT CCTCATAAAA AAGAAAGAGT TAATCATTTA GGTAATTTAG 300

TAATTACCTG GGGAGCTCAA ACTTTTAAAC ATCAAGCTTT TAATAAATTA GCTAACTTAT 360

TTATTGTAAA TAATAAAAAA CTTATTCCTA ATAATTTAGT TGAAAATTAT TTAACACCTA 420

TGAGTCTGGC ATATTGGTTT ATGGATGATG GAGGTAAATG GGATTATAAT AAAAATTCTC 480

TTAATAAAAG TATTGTATTA AATACACAAA GTTTTACTTT TGAAGAAGTA GAATATTTAC 540

TTAAAGGTTT AAGAAATAAA TTTCAATTAA ATTGTTATGT TAAAATTAAT AAAAATAAAC 600

TAATTCCTCA AATGATGTAT AAACTGCCTA ATACTATTTC ATCCGAAACT TTTTTAAAAT 720

AA 722

- (2) INFORMATION FOR SEO ID NO:4:
 - (i) SEOUENCE CHARACTERISTICS:
 - (A) LENGTH: 235 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Met Lys Asn Ile Lys Lys Asn Gln Val Met Asn Leu Gly Pro Asn Ser 1 5 10 15

Lys Leu Leu Lys Glu Tyr Lys Ser Gln Leu Ile Glu Leu Asn Ile Glu 20 25 30

Gln Phe Glu Ala Gly Ile Gly Leu Ile Leu Gly Asp Ala Tyr Ile Arg

35

Ser Arg Asp Glu Gly Lys Thr Tyr Cys Met Gln Phe Glu Trp Lys Asn 50 55 60

45

Lys Ala Tyr Met Asp His Val Cys Leu Leu Tyr Asp Gln Trp Val Leu 65 70 75 80

Ser Pro Pro His Lys Lys Glu Arg Val Asn His Leu Gly Asn Leu Val 85 90 95

Ile Thr Trp Gly Ala Gln Thr Phe Lys His Gln Ala Phe Asn Lys Leu
100 105 110

Ala Asn Leu Phe Ile Val Asn Asn Lys Lys Leu Ile Pro Asn Asn Leu 115 . 120 . 125

Val Glu Asn Tyr Leu Thr Pro Met Ser Leu Ala Tyr Trp Phe Met Asp 130 135 140

Asp Gly Gly Lys Trp Asp Tyr Asn Lys Asn Ser Leu Asn Lys Ser Ile 145 150 155 160

Val Leu Asn Thr Gln Ser Phe Thr Phe Glu Glu Val Cys Tyr Leu Val 165 170 175

Lys Gly Leu Arg Asn Lys Phe Gln Leu Asn Cys Tyr Val Lys Ile Asn 180 185 190

Lys Asn Lys Pro Ile Ile Tyr Ile Asp Ser Met Ser Tyr Leu Ile Phe 195 200 205

Tyr Asn Ile Ile Lys Pro Tyr Leu Ile Pro Gln Met Met Tyr Lys Leu 210 215 220

Pro Asn Thr Ile Ser Ser Glu Thr Phe Leu Lys 225 230 235

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 754 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

CCGGATCCAT GCATATGAAA AACATCAAAA AAAACCAGGT AATGAACCTG GGTCCGAACT

CTAAACTGCT GAAAGAATAC AAATCCCAGC TGATCGAACT GAACATCGAA CAGTTCGAAG

CAGGTATCGG TCTGATCCTG GGTGATGCTT ACATCCGTTC TCGTGATGAA GGTAAAACCT 180